

Ham Radio Technician Level Class Information West Seattle Amateur Radio Club

Thank you for registering to attend the Technician Class on Nov 10-11, 17-18!
We look forward to helping you achieve your Technician license.

When: Saturday, Nov 10, 2018: 9am – 5pm (lectures)
Sunday, Nov 11, 2018: 9am – 5 pm (lectures)
Saturday, Nov 17, 2018: 2 – 5 pm (optional review session)
Sunday, Nov 18, 2018: 12:00pm – 6:00 pm (Scenarios and demos)
Examination: Sunday, Nov 18, 2018: 6pm – 7:30pm

Where: Seattle Red Cross, rooms 207
1900 25th Ave. S, Seattle, WA 98144

Recommended text: **ARRL Ham Radio License Manual**, level 1
(Technician level), 4th ed. Be sure to get the 4th edition, with the
July 1, 2018 to June 30, 2022 question pool.
This is available from online sellers or directly from the ARRL. It
may also be in your library. A Kindle version is available.

Fee: There is no fee for the class. However, there is a \$15 fee to take the
license exam.

Class size: Minimum of 8 and maximum of 30

Age requirement: None. However, children under 16 should be accompanied
by an adult in class. Children under 12 may need extra help.

Note that a General level ham radio class (level 2) will be offered simultaneously
by Mr. David Okrent on Nov 16-18 at the Red Cross in room 130. To register for
the General class, call (206) 323-2345 and ask for Kevin Kopp or e-mail
dokrent@usa.net for details.

For the Class:

Bring the ARRL Ham Radio License Manual, level 1 book (or Kindle version)
along with any other study materials that you may have, to class. You may bring
a calculator if you like, although any calculations done in class are relatively
straightforward.

Location and parking.

The class and test will be at the Seattle Red Cross, 1900 25th Ave. S, Seattle,
WA 98144. There is some parking at the building and also street parking nearby.
At last check, there were no time limits or pay requirements for street parking.
The nearest bus line is the # 7, with frequent routes and a stop about 3 blocks
away.

Snacks and Lunch

Coffee and muffins will be provided. There are also snack machines at the Red Cross. For lunch, you will need to either bring your own or plan to eat locally (Lunch breaks are 1 ¼ hours). Nearby are a Burger King, Taco Time, and Borracchini's bakery/deli, with a Subway and McDonalds slightly further away.

Class sessions in detail

We intend this to be a fun, low-key, learning experience. We encourage class participation and asking questions. However, we will not call on individual students during class so that you can feel free to participate at your comfort level. Lectures will be presented on the first weekend, with demonstrations and short videos shown intermittently during the lectures. There will be an optional review session on Saturday Nov 17. On Sunday Nov 18 we will go through practical information with demonstrations and discussion of scenarios. The tentative class schedule is as follows (subject to minor changes):

Day 1 - Saturday, Nov 10, 2018	
Meet and Greet	9:00 - 9:30
Intro to ham radio - Chapter 1	9:30 - 10:05
Break	10:05 - 10:15
Licensing Regulations - Chapter 7	10:15 - 11:30
Lunch	11:30 - 12:45
Radio Signal Fundamentals - Chapter 2	12:45 - 2:10
Break	2:10 - 2:25
Electricity, Components and Circuits - Chapter 3	2:25 - 4:00
Break	4:00 - 4:10
Safety - Chapter 9	4:10 - 4:55

Day 2 - Sunday, Nov 11, 2018	
Operating Regulations - Chapter 8	9:00 - 10:10
Break	10:10 - 10:20
Propagation, Antennas & Feedlines - Chapter 4	10:20 - 11:50
Lunch	11:50 - 1:05
Radio Equipment - Chapter 5	1:05 - 2:45
Break	2:45 - 3:00
Communicating with other hams - Chapter 6	3:00 - 4:40
Q&A, review	4:40 - 5:00

Day 3 - Saturday, Nov 17, 2018	
Optional review session, Q&A	2:00 - 5:00

Day 4 - Sunday, Nov 18, 2018	
Questions and answers	12:00 - 12:15
Volunteer activities, events, CERTS, ARES, RACES	12:15 - 12:45
Disaster preparedness / hubs	12:45 - 1:45
Break	1:45 - 2:00
Scenarios	2:00 - 3:15
Break, snack	3:15 - 3:45
Demonstrations	3:45 - 5:45
Questions and answers	5:45 - 6:00
Exam	6:00

Students are not required to take the exam at this end of this class. There are many exam sessions offered by our club or elsewhere in the area if you feel the need for more study.

Explanation of the exam:

The Technician exam consists of 35 written multiple choice questions drawn from a question pool of approximately 425 questions. The question pool, which is updated every 4 years, is publically available and is included, with answers, in your book. Each question on the exam is randomly drawn from each of 35 topic areas. The passing score is 26 (74%). Morse code is not required. If you do not pass, you can, time permitting, take the exam again (with a different set of randomly generated questions) for another \$15 fee. If you pass and would like to try the next higher level exam (General or Amateur Extra), you may do that in the same test session, time permitting. Plan on the exam taking 1 ½ hours (including instructions, taking the exam, grading by the examiners and then getting your result).

Suggestions for study:

A number of good online practice exams and study guides are available to practice at home. We recommend <https://hamstudy.org/>. This site offers online “study flash cards,” “read the questions” and “practice tests.” Explanations are available by clicking in the upper right corner of the flash card. While practicing flash cards, the site uses progress tracking and will concentrate on review of sections that you are finding difficult. Another site offering practice exams is: <https://www.qrz.com/hamtest/>. There are also cellphone apps for ham radio study.

The class will teach the conceptual material during the first weekend. During the following week, we recommend studying the questions at home. You can use the book for review. Most people find it easiest to study one chapter at a time, until the questions become familiar, before moving to the next chapter (rather than going through all the questions in the book at once). The online study guide hamstudy.org, mentioned above, provides an excellent way to study. Then try some practice tests. Once you consistently score at least 26 out of 35 correct, you are ready for the test.

The following will be needed on the exam day:

Exam Fees

The fee of \$15.00 is charged to take the license test and can be paid by cash (preferred, and exact change please) or check (made out to “ARRL VEC”). If you do not pass the test and wish to retake the test, there is an additional fee of \$15.00 for each retake. Opportunity to retake the test will depend on the time left during the testing session and the availability of the volunteer examiners.

Valid ID is required at the time of the Exam

The following identification will be required at the test session prior to taking the exam. Please bring the following:

1. A legal photo ID (driver’s license, passport)
2. If no photo ID is available, two forms of identification:
 - a. non-photo ID/driver's license (some states still have them)
 - b. birth certificate (must have the appropriate seal)
 - c. social security card *
 - d. library card
 - e. utility bill, bank statement or other business correspondence that specifically names the person; or a postmarked envelope addressed to the person at his or her current mailing address as it appears on the Form 605.
3. Students/minors may bring any of the above items and/or a school ID, minor's work permit, report card, or a legal guardian may present a photo ID.

**Social Security Number or FCC Registration Number (FRN)*

Your SSN or FRN number are required by the FCC to be used on your license application forms. If you prefer not to give your SSN at the exam session, then you may register your SSN with the FCC before exam day. Once you have an FCC-issued FRN, you may no longer use your SSN on the application. For instructions on how to register your SSN with the FCC and receive a FRN, visit http://wireless.fcc.gov/uls/index.htm?job=about_getting_started

Materials needed for the exam

Bring at least two working black ink pens and at least two #2 Pencils (pre-sharpened as a sharpener will most likely not be available). If you would like to use scratch paper during the exam, please bring blank plain paper. A calculator is not required, however you may find it useful. A simple calculator without a memory is preferable. If bringing a programmable calculator, memories, formulas and programming must be erased and this will be verified prior to taking the exam. Calculator apps on cell phones, tablets or computers are not allowed during the test session.

During the test session, you will be asked to turn off your electronics, with the exception of a calculator. This helps maintain an environment conducive for testing for everyone.

General or Extra class exam takers:

If applicable, bring either a photocopy of your current Amateur Radio license or a reference copy printed out from the FCC website, the license information printed from ARRL website or QRZ website, or the original(s) and photocopy(s) of any Certificates of Successful Completion of Examination (CSCE) you may hold from previous exam sessions. If your license has already been issued by FCC, the CSCE showing license credit is not needed. The photocopy(s) will not be returned

If you have any questions, please contact me at AA7XX@westseattlearc.org.

David Hillier